REMARKS/ARGUMENTS

Claims 45-100 are pending in the application. Claims 45-100 are rejected. No new matter has been added. As explained in more detail below, Applicants submit that all claims are in condition for allowance and respectfully request such action.

Claim Rejections – 35 USC § 103

Claims 45-100 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gotwald (US 5,987,518) in further view of Addington (US 6,928,656). The Applicants respectfully traverse the rejection in view of the Remarks below.

The Office Action asserts that Addington teaches "a plurality of hierarchically modulated simultaneously transmitted data streams which respectively have a different priority assigned to the contents therein corresponding to a particular class of the content" as recited in the rejected claims, specifically, claims 45, 50, 56, and 59. The Applicants, however, respectfully submit that Addington does not teach the limitation as recited in the claims in view of the remaining limitations. For example, looking to exemplary claim 45, the claim also recites "a classifier [is] connect[ed] to a source of content and operable to place the content into at least one of a plurality of hierarchically modulated simultaneously transmitted data streams". For example, as shown in Figure 3, splitter 22 identifies the priority assigned to the contents of incoming packets and passes them to the appropriate stream (24 or 26) for transmission by the transmitter 11. (Specification, page 9, paragraph 0028)

As explained in more detail below, by utilizing this modulation scheme, different data streams can be sent simultaneously without multiplexing. In contrast, as discussed in the Response dated June 14, 2006, Gotwald (now the primary reference) merely discusses multiplexing of data, which is a less efficient process where data is taken from different streams and sent in a sequential order, but not simultaneously in a plurality of data streams as claimed. The Applicants respectfully further submit that the cited text of Addington (the secondary reference) also merely discloses the multiplexing of data streams and subsequent transmittal of the same through a single stream rather than a plurality of hierarchical modulated data streams. Addington provides:

> The IP server also directs and coordinates the flow of IP data between the headend 105 and the HCT 155 via **a** route 250. The route 250 is **a path** for the flow of IP data within the subscriber television system 101. A communications route within the subscriber television system 101 includes a Continuous Feed Session (CFS) created when the subnet is established and **the route** 250. **A route** is established for each IP data connection. **The route** 250 includes both a downstream communications path 241 and an upstream communications path 242 within the transmission medium 120.

(Col. 4, ll. 17-26; emphasis added). There is no teaching or suggestion of a classifier connected to a source of content and operable to place the content into at least one of a plurality of hierarchically modulated simultaneously transmitted data streams which respectively have a different priority assigned to the contents therein corresponding to a particular class of the content.

In fact, one of the passages of Addington cited by the Office Action states that "[a]n advantage of the IP data using **the same** MPEG transport stream as the program information is that other features of the subscriber television system 101 can be applied to the IP data. (Col. 4, ll. 50-53; emphasis added; see also Col. 4 ll. 46-49). The Applicants cannot find a plurality of data streams as recited (such as the HP and LP data streams discussed in relation to Figure 2 and 3 of the present application) anywhere in Gotwald or Addington.

In fact, where plural program streams are cited by the Examiner as being disclosed by Addington (Col.3, ll. 30-40) states:

> In the DBDS, video, audio, and control information are encoded as MPEG program streams, which are then multiplexed to form MPEG transport streams... For the HCT 115 to receive a television program, the HCT 115 must tune to the set frequency containing the television programming, de-multiplex the associated MPEG transport stream, and decode the appropriate MPEG program streams.

(Emphasis added). Therefore, hierarchically modulated simultaneously transmitted data streams are not disclosed. In contrast, exemplary embodiments having the claimed feature can be seen in Fig. 3 of the present application, where hierarchically modulated simultaneously transmitted data streams (24 and 26) are shown. Splitter 22 identifies the priority assigned to the contents of incoming packets and passes them to the appropriate stream (24 or 26) for transmission by the transmitter 11. (Specification, page 9, paragraph 0028) In the illustrated example, 24 is a high priority stream and 26 is a low priority stream, each being simultaneously transmitted.

Moreover, as shown in Figure 4, unlike merely prioritizing MPEG2 data, IP data, MPEG2 control messages, or other distinct information by only the protocol, aspects of the rejected claims allow the prioritization of data within these protocols, such as text, graphics, data files, email and video. Looking more closely at figure 4, one can see the advantages of the recited claims over Gotwald and/or Addington. Figure 4 illustrates the use of a plurality of hierarchically modulated simultaneously transmitted data streams which respectively have a different priority assigned to the contents therein corresponding to a particular class of the content. As explained in the Substitute Specification, the classifier 35 may assign priority of the data classes or types according to user profiles, such as illustrated profiles A and B shown in Figure 4. "The data is then encoded and placed in data containers before being passed to splitter 22 which identifies from the containers the priority assigned to their contents and passes them to the appropriate stream 24,26 [as opposed to a single multiplexed stream] for transmission by the transmitter 11." (Sub. Spec., para. 0026).

In the illustrated example, profile A relates to a mobile terminal and profile B relates to a fixed terminal. In the example, the mobile terminal profile ("A") has the "text" data type set to a HP stream while the "video" data type is set to a LP stream. In the described embodiment, the HP stream is more reliable (a receiver can more easily identify a quadrant over a particular constellation point), however, the bit rate of the HP stream will be less than that of the LP stream. Thus the LP stream can be utilized by the receiver where the C/N ratio is such as to allow the receiver to detect **not only** the quadrant **but also** a particular constellation point.

There is no correlation in either Gotwald or Addington, which only show a single stream being delivered to a single location. For example, Fig. 1 of Addington merely discloses one stream entering the single subscriber location 150.

For example, looking again at Figure 2, if the constellation diagram was for 64-QAM where each constellation point (such as point 33) within quadrant 31 was represented by 6 bits, each constellation point may have the same identical first pair of bits, such as "10" and differ by the remaining four bits. For example, point 33 may be represented by 100000 and another point within quadrant 31 may be represented by 100010. In such an example, in a hierarchical modulation using a plurality of data streams, the HP stream value may be "10" and the LP stream value for point 33, is "0000". Therefore, the text of the transmission will be carried on the HP

stream, while the video of the transmission will be carried on the LP stream, which is transmitted simultaneously.

For at least these reasons, the Applicants respectfully submit that neither Gotwald nor Addington teach, suggest, or otherwise disclose the subject matter of claims 45 – 100.

CONCLUSION

All rejections having been addressed, applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the number set forth below.

Applicant believes there is no fee due in association with the filing of this response, however, should there be any fees due the Commissioner is hereby authorized to charge any such fees or credit any overpayment of fees to Deposit Account No. 19-0733.

Respectfully submitted,

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Dated: November 30, 2006   By:

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